APPENDIX F-2

THE WHITE HOUSE
National Science and Technology Council

September 19, 1996

FACT SHEET
NATIONAL SPACE POLICY

Introduction

(1) For over three decades, the United States has led the world in the exploration and use of outer space. Our achievements in space have inspired a generation of Americans and people throughout the world. We will maintain this leadership role by supporting a strong, stable, and balanced national space program that serves our goals in national security, foreign policy, economic growth, environmental stewardship, and scientific and technical excellence. Access to and use of space are central for preserving peace and protecting U.S. national security as well as civil and commercial interests. The United States will pursue greater levels of partnership and cooperation in national and international space activities and work with other nations to ensure the continued exploration and use of outer space for peaceful purposes.

(2) The goals of the U.S. space program are to:
- (a) Enhance knowledge of the Earth, the solar system, and the universe through human and robotic exploration;
- (b) Strengthen and maintain the national security of the United States;
- (c) Enhance the economic competitiveness and scientific and technical capabilities of the United States;
- (d) Encourage State, local, and private sector investment in, and use of, space technologies;
- (e) Promote international cooperation to further U.S. domestic, national security, and foreign policies.

(3) The United States is committed to the exploration and use of outer space by all nations for peaceful purposes and for the benefit of all humanity. "Peaceful purposes" allow defense and intelligence-related activities in pursuit of national security and other goals. The United States rejects any claims to sovereignty by any nation over outer space or celestial bodies, or any portion thereof, and rejects any limitations on the fundamental right of sovereign nations to acquire data from space. The United States considers the space systems of any nation to be national property with the right of passage through and operations in space without interference. Purposeful interference with space systems shall be viewed as an infringement on sovereign rights.

(4) The U.S. Government will maintain and coordinate separate national security and civil space systems where differing needs dictate. All actions undertaken by agencies and departments in implementing the national space policy shall be consistent with U.S. law, regulations, national security requirements, foreign policy, international obligations, and nonproliferation policy.

(5) The National Science and Technology Council (NSTC) is the principal forum for resolving issues related to national space policy. As appropriate, the NSTC and NSC will co-chair policy processes. This policy will be implemented within the overall resource and policy guidance provided by the President.

Civil Space Guidelines

(1) The National Aeronautics and Space Administration is the lead agency for research and development in civil space activities.

(2) NASA, in coordination with other departments and agencies as appropriate, will focus its research and development efforts in: space science to enhance knowledge of the solar system, the universe, and fundamental natural and physical sciences; Earth observation to better understand global change and the effect of natural and human influences on the environment; human space flight to conduct scientific, commercial, and exploration activities; and space technologies and applications to develop new technologies in support of U.S. Government needs and our economic competitiveness.

(3) To enable these activities, NASA will:
   (a) Develop and operate the International Space Station to support activities requiring the unique attributes of humans in space and establish a permanent human presence in Earth orbit. The International Space Station will support future decisions on the feasibility and desirability of conducting further human exploration activities.
   (b) Work with the private sector to develop flight demonstrators that will support a decision by the end of the decade on development of a next-generation reusable launch system.
   (c) Continue a strong commitment to space science and Earth science programs. NASA will undertake:
      (i) a sustained program to support a robotic presence on the surface of Mars by the year 2000 for the purposes of scientific research, exploration, and technology development;
      (ii) a long-term program, using innovative new technologies, to obtain in-situ measurements and sample returns from the celestial bodies in the solar system;.
      (iii) a long-term program to identify and characterize planetary bodies in orbit around other stars;
      (iv) a program of long-term observation, research, and analysis of the Earth's land, oceans, atmosphere, and their interactions, including continual measurements from the Earth Observing System by 1998.
   (d) In carrying out these activities, NASA will develop new and innovative space technologies and smaller, more capable spacecraft to improve the performance and lower the cost of future space missions.

(4) In the conduct of these research and development programs, NASA will:
   (a) Ensure safety on all space flight missions involving the Space Shuttle and the International Space Station.
   (b) Emphasize flight programs that reduce mission costs and development times by implementing innovative procurement practices, validating new technologies and promoting partnerships between government, industry, and academia.
   (c) Acquire spacecraft from the private sector unless, as determined by the NASA Administrator, development requires the unique technical capabilities of a NASA center.
   (d) Make use of relevant private sector remote sensing capabilities, data, and information products and establish a demonstration program to purchase data products from the U.S. private sector.
   (e) Use competition and peer review to select scientific investigators.
   (f) Seek to privatize or commercialize its space communications operations no later than 2005.

(g) Examine, with DoD, NOAA, and other appropriate Federal agencies, the feasibility of consolidating ground facilities and data communications systems that cannot otherwise be provided by the private sector.

(5) The Department of Commerce (DoC), through the National Oceanic and Atmospheric Administration (NOAA), has the lead responsibility for managing Federal space-based civil operational Earth observations necessary to meet civil requirements. In this role, DoC, in coordination with other appropriate agencies, will:
   (a) acquire data, conduct research and analyses, and make required predictions about the Earth's environment;
   (b) consolidate operational U.S. Government civil requirements for data products, and define and operate Earth observation systems in support of operational monitoring needs; and
   (c) in accordance with current policy and Public Law 102-555, provide for the regulation and licensing of the operation of private sector remote sensing systems.

(6) The Department of the Interior, through the U.S. Geological Survey (USGS), will maintain a national archive of land remote sensing data and other surface data as appropriate, making such data available to the U.S. Government and other users.

(7) The Department of Energy will maintain the necessary capability to support civil space missions, including research on space energy technologies and space radiation effects and safety.

National Security Space Guidelines

(1) The United States will conduct those space activities necessary for national security. These activities will be overseen by the Secretary of Defense and the Director of Central Intelligence (DCI) consistent with their respective responsibilities as set forth in the National Security Act of 1947, as amended, other applicable law, and Executive Order 12333. Other departments and agencies will assist as appropriate.

(2) Improving our ability to support military operations worldwide, monitor and respond to strategic military threats, and monitor arms control and nonproliferation agreements and activities are key priorities for national security space activities. The Secretary of Defense and the DCI shall ensure that defense and intelligence space activities are closely coordinated and that space architectures are integrated to the maximum extent feasible, and will continue to modernize and improve their respective activities to collect against, and respond to, changing threats, environments, and adversaries.

(3) National security space activities shall contribute to U.S. national security by:
   (a) providing support for the United States' inherent right of self-defense and our defense commitments to allies and friends;
   (b) deterring, warning, and, if necessary, defending against enemy attack;
   (c) assuring that hostile forces cannot prevent our own use of space;
   (d) countering, if necessary, space systems and services used for hostile purposes;
   (e) enhancing operations of U.S. and allied forces;
   (f) ensuring our ability to conduct military and intelligence space-related activities;
   (g) satisfying military and intelligence requirements during peace and crisis as well as through all levels of conflict;
   (h) supporting the activities of national policy makers, the intelligence community, the National Command Authorities, combatant commanders and the military services, other Federal officials, and continuity of Government operations.

(4) Critical capabilities necessary for executing space missions must be assured. This requirement will be considered and implemented at all stages of architecture and system planning, development, acquisition, operation, and support.

(5) The Department of Energy, in coordination with DoD, ACDA, and the DCI will carry out research on and development of technologies needed to effectively verify international agreements to control special nuclear materials and nuclear weapons.

(6) Defense Space Sector Guidelines:
   (a) DoD shall maintain the capability to execute the mission areas of space support, force enhancement, space control, and force application.
   (b) In accordance with Executive Orders and applicable directives, DoD shall protect critical space-related technologies and mission aspects.
   (c) DoD, as launch agent for both the defense and intelligence sectors, will maintain the capability to evolve and support those space transportation systems, infrastructure, and support activities necessary to meet national security requirements. DoD will be the lead agency for improvement and evolution of the current expendable launch vehicle fleet, including appropriate technology development.
   (d) DoD will pursue integrated satellite control and continue to enhance the robustness of its satellite control capability. DoD will coordinate with other departments and agencies, as appropriate, to foster the integration and interoperability of satellite control for all governmental space activities.
   (e) The Secretary of Defense will establish DoD's specific requirements for military and national-level intelligence information.
   (f) The Secretary of Defense, in concert with the DCI, and for the purpose of supporting operational military forces, may propose modifications or augmentations to intelligence space systems as necessary. DoD may develop and operate space systems to support military operations in the event that intelligence space systems cannot provide the necessary intelligence support to DoD.
   (g) Consistent with treaty obligations, the United States will develop, operate, and maintain space control capabilities to ensure freedom of action in space and, if directed, deny such freedom of action to adversaries. These capabilities may also be enhanced by diplomatic, legal, or military measures to preclude an adversary's hostile use of space systems and services. The United States will maintain and modernize space surveillance and associated battle management command, control, communications, computers, and intelligence to effectively detect, track, categorize, monitor, and characterize threats to U.S. and friendly space systems and contribute to the protection of U.S. military activities.
   (h) The United States will pursue a ballistic missile defense program to provide for: enhanced theater missile defense capability later this decade; a national missile defense deployment readiness program as a hedge against the emergence of a long-range ballistic missile threat to the United States; and an advanced technology program to provide options for improvements to planned and deployed defenses.

(7) Intelligence Space Sector Guidelines:
   (a) The DCI shall ensure that the intelligence space sector provides timely information and data to support foreign, defense, and economic policies, military operations, diplomatic activities, indications and warning, crisis management, and treaty verification, and that the sector performs research and development related to these functions.
   (b) The DCI shall continue to develop and apply advanced technologies that respond to changes in the threat environment and support national intelligence priorities.
   (c) The DCI shall work closely with the Secretary of Defense to improve the intelligence space sector's ability to support military operations worldwide.

(d) The nature, the attributable collected information, and the operational details of intelligence space activities will be classified. The DCI shall establish and implement policies to provide appropriate protection for such data, including provisions for the declassification and release of such information when the DCI deems that protection is no longer required.
(e) Collected information that cannot be attributed to space systems will be classified according to its content.
(f) These guidelines do not apply to imagery products, the protection of which is governed by Executive Order 12951.
(g) Strict security procedures will be maintained to ensure that public discussion of satellite reconnaissance by Executive Branch personnel and contractors is consistent with DCI guidance. Executive Branch personnel and contractors should refrain from acknowledging or releasing information regarding satellite reconnaissance until a security review has been made.
(h) The following facts are UNCLASSIFIED:
    (i) That the United States conducts satellite photoreconnaissance for peaceful purposes, including intelligence collection and monitoring arms control agreements.
    (ii) That satellite photoreconnaissance includes a near real-time capability and is used to provide defense-related information for indications and warning, and the planning and conduct of military operations.
    (iii) That satellite photoreconnaissance is used in the collection of mapping, charting, and geodetic data and such data is provided to authorized Federal agencies.
    (iv) That satellite photoreconnaissance is used to collect mapping, charting, and geodetic data to develop global geodetic and cartographic materials to support defense and other mapping-related activities.
    (v) That satellite photoreconnaissance can be used to collect scientific and environmental data and data on natural or human-made disasters, and such data can be disseminated to authorized Federal agencies.
    (vi) That photoreconnaissance assets can be used to image the United States and its territories and possessions.
    (vii) That the United States conducts overhead signals intelligence collection.
    (viii) That the United States conducts overhead measurement and signature intelligence collection.
    (ix) The existence of the National Reconnaissance Office and the identification and official titles of its senior officials. All other details, facts, and products of intelligence space activities are subject to appropriate classification and security controls as determined by the DCI.
    (x) Changes to the space intelligence security policy set forth in the national space policy can be authorized only by the President.

Commercial Space Guidelines

(1) The fundamental goal of U.S. commercial space policy is to support and enhance U.S. economic competitiveness in space activities while protecting U.S. national security and foreign policy interests. Expanding U.S. commercial space activities will generate economic benefits for the Nation and provide the U.S. Government with an increasing range of space goods and services.

(2) U.S. Government agencies shall purchase commercially available space goods and services to the fullest extent feasible and shall not conduct activities with commercial applications that preclude or deter commercial space activities except for reasons of national security or public safety. A space good or service is "commercially available" if it is currently offered commercially, or if it could be supplied commercially in response to a Government service procurement request. "Feasible" means that such goods or services meet mission requirements in a cost-effective manner.

(3) The United States will pursue its commercial space objectives without the use of direct Federal subsidies. Commercial sector space activities shall be supervised or regulated only to the extent required by law, national security, international obligations, and public safety.

(4) To stimulate private sector investment, ownership, and operation of space assets, the U.S. Government will facilitate stable and predictable U.S. commercial sector access to appropriate U.S. Government space-related hardware, facilities, and data. The U.S. Government reserves the right to use such hardware, facilities, and data on a priority basis to meet national security and critical civil sector requirements. Government space sectors shall:
   (a) Enter into appropriate cooperative agreements to encourage and advance private sector basic research, development, and operations while protecting the commercial value of the intellectual property developed.
   (b) Identify, and propose appropriate amendments to or the elimination of, applicable portions of U.S. laws and regulations that unnecessarily impede commercial space sector activities.
   (c) Consistent with national security, provide for the timely transfer of Government-developed space technology to the private sector in such a manner as to protect its commercial value, including retention of technical data rights by the private sector.
   (d) To the extent feasible, pursue innovative methods for procurement of space products and services.

(5) Free and fair trade in commercial space launch services is a goal of the United States. In support of this goal, the United States will implement, at the expiration of current space launch agreements, a strategy for transitioning from negotiated trade in launch services toward a trade environment characterized by the free and open interaction of market economies. The U.S. Trade Representative, in coordination with the Office of Science and Technology Policy and the National Economic Council, will develop a strategy to guide this implementation.

(6) Consistent with Executive Order 12046 and applicable statutes, U.S. Government agencies and departments will ensure that U.S. Government telecommunications policies support a competitive international environment for space-based telecommunications.

Intersector Guidelines

The following paragraphs identify priority intersector guidance to support major U.S. space policy objectives.

(1) International Cooperation
   The United States will pursue and conduct international cooperative space-related activities that achieve scientific, foreign policy, economic, or national security benefits for the Nation. International agreements related to space activities shall be subject to normal interagency coordination procedures, consistent with applicable laws and regulations. U.S. cooperation in international civil space activities will:
   (a) Promote equitable cost-sharing and yield benefits to the United States by increasing access to foreign scientific and technological data and expertise and foreign research and development facilities;
   (b) Enhance relations with U.S. allies and Russia while supporting initiatives with other states of the former Soviet Union and emerging spacefaring nations;
   (c) Support U.S. technology transfer and nonproliferation objectives;
   (d) Create new opportunities for U.S. commercial space activities; and
   (e) Protect the commercial value of intellectual property developed with Federal support and ensure that technology transfers resulting from cooperation do not undermine U.S. competitiveness and national security.

(f) In support of these objectives:
  (i) NASA and the Department of State will negotiate changes in the existing legal framework for International Space Station cooperation to include Russia in the program along with the United States, Europe, Japan, and Canada; and
  (ii) NASA, in coordination with concerned U.S. Government agencies, will explore with foreign space agencies and international organizations the possible adoption of international standards for the interoperability of civil research spacecraft communication and control facilities.

(2) Space Transportation
  (a) Assuring reliable and affordable access to space through U.S. space transportation capabilities is fundamental to achieving national space policy goals. Therefore, the United States will:
    (i) Balance efforts to modernize existing space transportation capabilities with the need to invest in the development of improved future capabilities;
    (ii) Maintain a strong transportation capability and technology base to meet national needs for space transport of personnel and payloads;
    (iii) Promote reduction in the cost of current space transportation systems while improving their reliability, operability, responsiveness, and safety;
    (iv) Foster technology development and demonstration to support a future decision on the development of next-generation reusable space transportation systems that greatly reduce the cost of access to space;
    (v) Encourage, to the fullest extent feasible, the cost-effective use of commercially provided U.S. products and services that meet mission requirements; and
    (vi) Foster the international competitiveness of the U.S. commercial space transportation industry, actively considering commercial needs and factoring them into decisions on improvements to launch facilities and vehicles.
  (b) The Department of Transportation (DoT) is the lead agency within the Federal Government for regulatory guidance pertaining to commercial space transportation activities, as set forth in 49 U.S.C. 701, et seq., and Executive Order 12465. The U.S. Government encourages and will facilitate U.S. private sector and State and local government space launch and recovery activities.
  (c) All activities related to space transportation undertaken by U.S. agencies and departments will be consistent with PDD/NSTC-4.

(3) Space-Based Earth Observation
  (a) The United States requires a continuing capability for space-based Earth observation to provide information useful for protecting public health, safety, and national security. Such a capability contributes to economic growth and stimulates educational, scientific, and technological advancement. The U.S. Government will:
    (i) Continue to develop and operate space-based Earth observing systems, including satellites, instruments, data management, and dissemination activities;
    (ii) Continue research and development of advanced space-based Earth observation technologies to improve the quality and reduce the costs of Earth observations;
    (iii) Support the development of U.S. commercial Earth observation capabilities by:
      — pursuing technology development programs, including partnerships with industry;
      — licensing the operation and, as appropriate, the export of private Earth observation systems and technologies, consistent with existing policy;
      — providing U.S. Government civil data to commercial firms on a nondiscriminatory basis to foster the growth of the "value-added" data enhancement industry; and

— making use, as appropriate, of relevant private sector capabilities, data, and information products in implementing this policy.

(iv) Produce and archive long-term environmental data sets.

(b) The U.S. Government will continue to use Earth observation systems to collect environmental data and provide all U.S. Government civil environmental data and data products consistent with OMB Circular A-130, applicable statutes and guidelines contained in this directive.

(c) The U. S. Government will seek mutually beneficial cooperation with U.S. commercial and other national and international Earth observation system developers and operators, to:

(i) define an integrated global observing strategy for civil applications;

(ii) develop U.S. Government civil Earth-observing systems in coordination with other national and international systems to ensure the efficient collection and dissemination of the widest possible set of environmental measurements;

(iii) obtain Earth observation data from non-U.S. sources, and seek to make such data available to users consistent with OMB Circular A-130, national security requirements, and commercial sector guidance contained in the national space policy; and

(iv) support, as appropriate, the public, nondiscriminatory direct readout of data from Federal civil systems.

(d) The U.S. Government space sectors will coordinate and, where feasible, seek to consolidate Earth observation activities to reduce overlaps in development, measurements, information processing, and archiving where cost-effective and consistent with U.S. space goals.

(i) In accordance with PDD/NSTC-2, DoC/NOAA, DoD, and NASA shall establish a single, converged National Polar-Orbiting Environmental Satellite System to satisfy civil and national security requirements.

(ii) NASA, DoC/NOAA, DoD, the intelligence community, and DoE shall work together to identify, develop, demonstrate, and transition advanced technologies to U.S. Earth observation satellite systems.

(iii) In accordance with PDD/NSTC-3, NASA, DoC/NOAA, and DoI/USGS shall develop and operate an ongoing program to measure the Earth's land surface from space and ensure the continuity of the Landsat-type data set.

(iv) Consistent with national security, the U.S. Government space sectors shall continue to identify national security products and services that can contribute to global change research and civil environmental monitoring, and seek to make technology, products, and services available to civil agencies for such uses. Both unclassified and, as appropriate, classified data from national security programs will be provided through established mechanisms.

(4) Nonproliferation, Export Controls, and Technology Transfer

(a) The MTCR Guidelines are not designed to impede national space programs or international cooperation in such programs as long as such programs could not contribute to delivery systems for weapons of mass destruction. Consistent with U.S. nonproliferation policy, the United States will continue to oppose missile programs of proliferation concern, and will exercise particular restraint in missile-related cooperation. The United States will continue to retain a strong presumption of denial against exports of complete space launch vehicles or other MTCR Category I components.

(b) The United States will maintain its general policy of not supporting the development or acquisition of space launch vehicle systems in non-MTCR states.

(c) For MTCR countries, we will not encourage new space launch vehicle programs which raise questions from a proliferation and economic standpoint. The United States will, however, consider exports of MTCR-controlled items to MTCR countries. Additional safeguard measures could also be considered for such exports, where appropriate. Any exports would remain subject to the nontransfer provisions of the INF and START treaties.

(d) The United States will work to stem the flow of advanced space technology to unauthorized destinations. Executive departments and agencies will be fully responsible for protecting against adverse technology transfer in the conduct of their programs.

(e) In entering into space-related technology development and transfer agreements with other countries, Executive departments and agencies will take into consideration whether such countries practice and encourage free and fair trade in commercial space activities.

(5) Arms Control

The United States will consider and, as appropriate, formulate policy positions on arms control and related measures governing activities in space, and will conclude agreements on such measures only if they are equitable and effectively verifiable and enhance the security of the United States and our allies. The Arms Control and Disarmament Agency (ACDA) is the principal agency within the Federal Government for arms control matters. ACDA, in coordination with DoD, the DCI, State, DoE, and other appropriate Federal agencies, will identify arms control issues and opportunities related to space activities and examine concepts for measures that support national security objectives.

(6) Space Nuclear Power

The Department of Energy will maintain the necessary capability to support space missions which may require the use of space nuclear power systems. U.S. Government agency proposals for international cooperation involving space nuclear power systems are subject to normal interagency review procedures. Space nuclear reactors will not be used in Earth orbit without specific approval by the President or his designee. Such requests for approval will take into account public safety, economic considerations, international treaty obligations, and U.S. national security and foreign policy interests. The Office of Science and Technology Policy, in coordination with the NSC staff, will examine the existing approval process, including measures to address possible commercial use of space nuclear systems.

(7) Space Debris

(a) The United States will seek to minimize the creation of space debris. NASA, the intelligence community, and DoD, in cooperation with the private sector, will develop design guidelines for future Government procurements of spacecraft, launch vehicles, and services. The design and operation of space tests, experiments, and systems will minimize or reduce accumulation of space debris consistent with mission requirements and cost-effectiveness.

(b) It is in the interest of the U.S. Government to ensure that space debris minimization practices are applied by other spacefaring nations and international organizations. The U.S. Government will take a leadership role in international forums to adopt policies and practices aimed at debris minimization and will cooperate internationally in the exchange of information on debris research and the identification of debris mitigation options.

(8) Government Pricing

The price charged for the use of U.S. Government facilities, equipment, and services will be based on the following principles:

(a) Prices charged to U.S. private sector and State and local government space activities for the use of U.S. Government facilities, equipment, and services will be based on costs consistent with Federal guidelines, applicable statutes, and the commercial guidelines contained within the policy. The U.S. Government will not seek to recover design and development costs or investments associated with any existing facilities or new facilities required to meet U.S. Government needs and to which the U.S. Government retains title.

(b) Consistent with mission requirements, NASA and DoD will seek to use consistent pricing practices for facilities, equipment, and services.

(c) Tooling, equipment, and residual hardware on hand at the completion of U.S. Government programs will be priced and disposed of on a basis that is in the best overall interest of the United States while not precluding or deterring the continuing development of the U.S. commercial space sector.